FOREWORD

This manual covers the service procedures of the TOYOTA FORKLIFT 7FGU/7FDU35 ~ 80 series and 7FGCU35 ~ 70 series. Please use this manual for providing quick, correct servicing of the corresponding forklift models.

This manual deals with the above models as of December 2000. Please understand that disagreement can take place between the descriptions in the manual and actual vehicles due to change in design and specifications. Any change or modifications thereafter will be informed by Toyota Industrial Equipment Parts & Service News.

For the service procedures of the mounted engine, read the repair manuals listed below as reference together with this manual.

(Reference)

Repair manuals related to this manual are as follows:

TOYOTA GM6-262 ENGINE REPAIR MANUAL (No. C4630)

TOYOTA GM6-262 ENGINE REPAIR MANUAL Supplement (No. CU668)

TOYOTA 11Z, 12Z, 13Z, 14Z ENGINE REPAIR MANUAL (No. C4615-2)

TOYOTA 15Z ENGINE REPAIR MANUAL (No. CE673)

Three Way Catalytic System REPAIR MANUAL (No. CU643-2)

LPG DEVICE (for GM6-262 engine) REPAIR MANUAL (No. CU667)

TOYOTA INDUSTRIAL EQUIPMENT 7FGU/7FDU35-80 OPS REPAIR MANUAL (No. CU041)

TOYOTA INDUSTRIAL EQUIPMENT PARTS & SERVICE NEWS (No. GE-7008)

TOYOTA Material Handling Company

A Division of TOYOTA INDUSTRIES CORPORATION

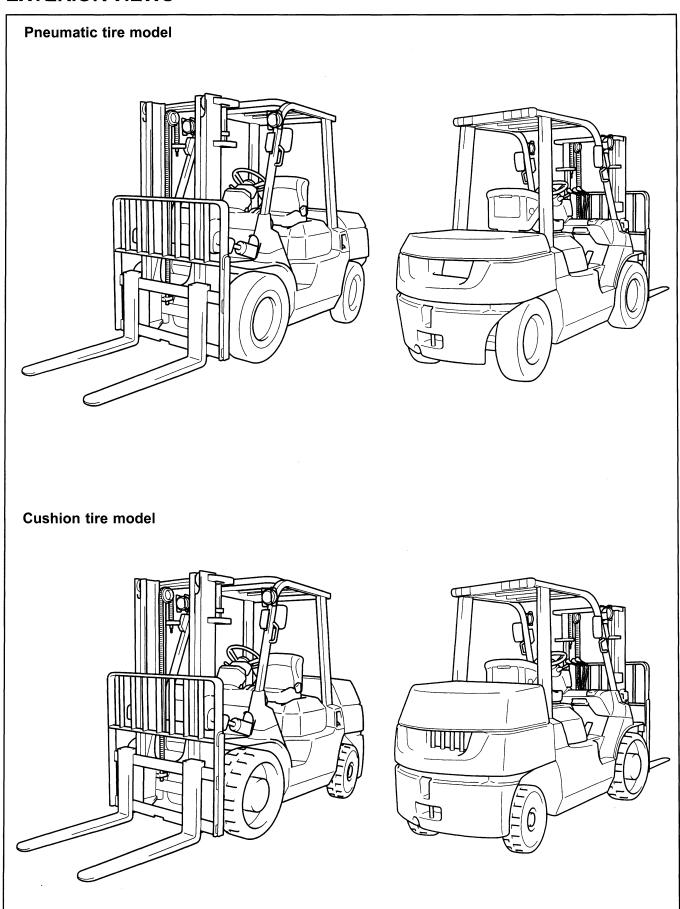
SECTION INDEX

| NAME | SECTION |
|---------------------------------|---------|
| GENERAL | 0 |
| ENGINE | 1 |
| TORQUE CONVERTER & TRANSMISSION | 2 |
| PROPELLER SHAFT | 3 |
| DIFFERENTIAL | 4 |
| FRONT AXLE | 5 |
| REAR AXLE | 6 |
| STEERING | 7 |
| BRAKE | 8 |
| BODY | 9 |
| MATERIAL HANDLING SYSTEM | 10 |
| MAST | 11 |
| CYLINDER | 12 |
| OIL PUMP | 13 |
| OIL CONTROL VALVE | 14 |
| SAS | 15 |
| APPENDIX | 16 |

GENERAL

| | Page |
|--|---------|
| EXTERIOR VIEWS | 0-2 |
| VEHICLE MODEL (~ 2007.12) | 0-3 |
| VEHICLE MODEL (2008.1 ~) | |
| FRAME NUMBER (~ 2007.12) | . 0-4 |
| FRAME NUMBER (2008.1 ~) | . 0-4A |
| HOW TO USE THIS MANUAL | . 0-5 |
| EXPLANATION METHOD | . 0-5 |
| TERMINOLOGY | . 0-6 |
| ABBREVIATIONS | |
| OPERATIONAL TIPS | . 0-7 |
| HOISTING THE VEHICLE | . 0-7 |
| ATTENTIVE POINTS ON SAS | . 0-8 |
| CIRCUIT TESTER | 0-9 |
| STANDARD BOLT & NUT TIGHTENING | |
| TORQUE | |
| BOLT STRENGTH TYPE IDENTIFICATION METHOD | |
| TIGHTENING TORQUE TABLE | |
| PRECOAT BOLTS | . 0-13 |
| HIGH PRESSURE HOSE FITTING | |
| TIGHTENING TORQUE | |
| WIRE ROPE SUSPENSION ANGLE LIST | . 0-14 |
| SAFE LOAD FOR EACH WIRE ROPE | |
| SUSPENSION ANGLE | |
| COMPONENTS WEIGHT (~ 2007.12) | |
| COMPONENTS WEIGHT (2008.1 ~) | . 0-15A |
| RECOMMENDED LUBRICANT | |
| QUANTITY & TYPES (~ 2007.12) | . 0-16 |
| RECOMMENDED LUBRICANT | |
| QUANTITY & TYPES (2008.1 ~) | |
| LUBRICATION CHART | |
| PERIODIC MAINTENANCE | . 0-20 |
| PERIODIC REPLACEMENT OF PARTS AND | |
| LUBRICANTS | 0-26 |

EXTERIOR VIEWS



VEHICLE MODEL (~ 2007.12)

Pneumatic Tire Models (Pn)

| Classification | | | | | | |
|--------------------|----------------|------------------|---------------|-------------------|--------------|----------|
| Series | Model | Load Capacity | Vehicle Model | Transmission Type | Engine | |
| | D- 25 | 0000 lb - | 7FGU35 | T/C | G4 (GM6-262) | Gasoline |
| Pn3.5 ton series | Pn35 | 8000 lbs | 7FDU35 | T/C | 13Z | Diesel |
| i iio.o ton senes | D=40 | 0000 lba | 7FGKU40 | T/C | G4 (GM6-262) | Gasoline |
| | Pn40 | 9000 lbs | 7FDKU40 | T/C | 13Z | Diesel |
| | D:: 4E | Pn45 10000 lbs | 7FGU45 | T/C | G4 (GM6-262) | Gasoline |
| Pn4.5 ton series | P1140 | | 7FDU45 | T/C | 13Z | Diesel |
| 1 114.3 ton series | Pn50 | 11000 lbs | 7FGAU50 | T/C | G4 (GM6-262) | Gasoline |
| | | | 7FDAU50 | T/C | 13Z | Diesel |
| | D=60 | 42500 lba | 7FGU60 | T/C | G4 (GM6-262) | Gasoline |
| | Pn60 | Pn60 13500 lbs | 7FDU60 | T/C | 13Z | Diesel |
| Pn6.0 ton series | Pn70 | n70 15500 lbs | 7FGU70 | T/C | G4 (GM6-262) | Gasoline |
| | | | 7FDU70 | T/C | 13Z | Diesel |
| | Pn80 17500 lbs | 47500 !! | 7FGU80 | T/C | G4 (GM6-262) | Gasoline |
| 1 | | 17300108 | 7FDU80 | T/C | 13Z | Diesel |

Cushion Tire Models (Cu)

| Classification | | | | | | |
|------------------|-------|---------------|---------------|-------------------|--------------|----------|
| Series | Model | Load Capacity | Vehicle Model | Transmission Type | Engine | |
| Cu2 5 ton corios | Cu35 | 8000 lbs | 7FGCU35 | T/C | G4 (GM6-262) | Gasoline |
| Cu3.5 ton series | Cu45 | 10000 lbs | 7FGCU45 | T/C | G4 (GM6-262) | Gasoline |
| | Cu55 | 12000 lbs | 7FGCU55 | T/C | G4 (GM6-262) | Gasoline |
| Cu5.5 ton series | Cu60 | 13500 lbs | 7FGCU60 | T/C | G4 (GM6-262) | Gasoline |
| | Cu70 | 15500 lbs | 7FGCU70 | T/C | G4 (GM6-262) | Gasoline |

Note:

The G4 engine is the same as the GM6-262 engine except for the nomenclature.

VEHICLE MODEL (2008.1 ~)

Pneumatic Tire Models (Pn)

| Classification | | | | | | |
|---------------------|----------------|---------------|---------------|-------------------|--------------|----------|
| Series | Model | Load Capacity | Vehicle Model | Transmission Type | Engine | |
| | D=25 | 9000 lba | 7FGU35 | T/C | G4 (GM6-262) | Gasoline |
| Pn3.5 ton series | Pn35 | 8000 lbs | 7FDU35 | T/C | 15Z | Diesel |
| 1 110.0 toll selles | D=40 | 0000 lb - | 7FGKU40 | T/C | G4 (GM6-262) | Gasoline |
| | Pn40 | 9000 lbs | 7FDKU40 | T/C | 15Z | Diesel |
| | Dn 4F | 10000 lba | 7FGU45 | T/C | G4 (GM6-262) | Gasoline |
| Pn4.5 ton series | Pn45 | 10000 lbs | 7FDU45 | T/C | 15Z | Diesel |
| T II4.5 toll selles | Pn50 | 11000 lbs | 7FGAU50 | T/C | G4 (GM6-262) | Gasoline |
| | | | 7FDAU50 | T/C | 15Z | Diesel |
| | D=CO | 12500 lba | 7FGU60 | T/C | G4 (GM6-262) | Gasoline |
| | Pn60 13500 lbs | 7FDU60 | T/C | 15Z | Diesel | |
| Pn6.0 ton series | Pn70 1 | 15500 lbs | 7FGU70 | T/C | G4 (GM6-262) | Gasoline |
| riio.o ton senes | | | 7FDU70 | T/C | 15Z | Diesel |
| | D 00 | 47500 !! | 7FGU80 | T/C | G4 (GM6-262) | Gasoline |
| Pn | Pn80 | 17500 lbs | 7FDU80 | T/C | 15Z | Diesel |

Cushion Tire Models (Cu)

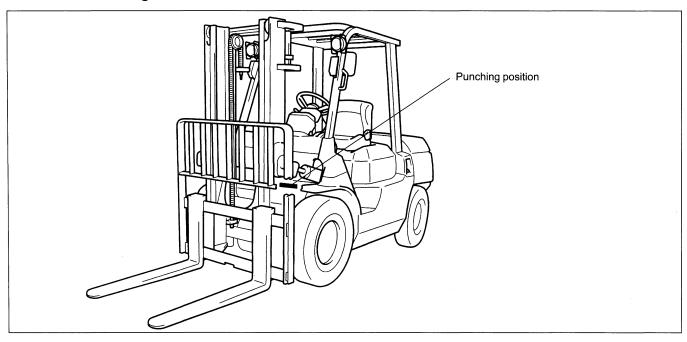
| Classification | | | | | | |
|------------------|-------|---------------|---------------|-------------------|--------------|----------|
| Series | Model | Load Capacity | Vehicle Model | Transmission Type | Engine | |
| Cu3.5 ton series | Cu35 | 8000 lbs | 7FGCU35 | T/C | G4 (GM6-262) | Gasoline |
| | Cu45 | 10000 lbs | 7FGCU45 | T/C | G4 (GM6-262) | Gasoline |
| | Cu55 | 12000 lbs | 7FGCU55 | T/C | G4 (GM6-262) | Gasoline |
| Cu5.5 ton series | Cu60 | 13500 lbs | 7FGCU60 | T/C | G4 (GM6-262) | Gasoline |
| | Cu70 | 15500 lbs | 7FGCU70 | T/C | G4 (GM6-262) | Gasoline |

Note:

The G4 engine is the same as the GM6-262 engine except for the nomenclature.

FRAME NUMBER (~ 2007.12)

Frame No. Punching Position

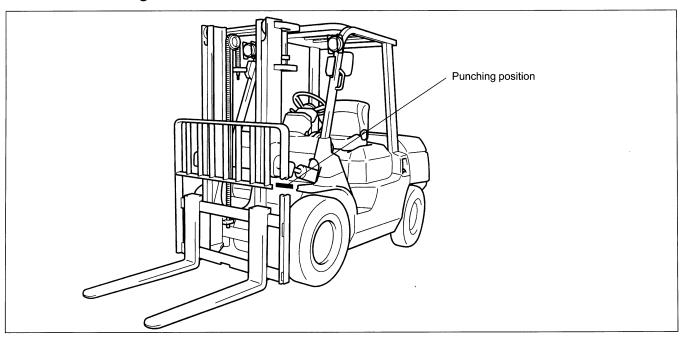


| | Series | Engine | Vehicle model | Punching format | |
|-----------------|----------------|------------------|---------------|-------------------|--|
| | | 0.4 (0.40, 0.00) | 7FGU35 | 750141140 00044 | |
| | 2 F ton coring | G4 (GM6-262) | 7FGKU40 | 7FGKU40 - 60011 | |
| | 3.5 ton series | 13Z | 7FDU35 | 7FDKU40 - 60011 | |
| | | 132 | 7FDKU40 | /FDKU40-60011 | |
| | | G4 (GM6-262) | 7FGU45 | 7FGAU50 - 60011 | |
| | 4.5 ton series | G4 (GIVIO-202) | 7FGAU50 | 71 GA030-00011 | |
| Pneumatic tire | 4.5 ton senes | 13Z | 7FDU45 | 7FDAU50 - 60011 | |
| Friedmatic tire | | 132 | 7FDAU50 | 71 DA030 - 000 11 | |
| | | G4 (GM6-262) | 7FGU60 | | |
| | | | 7FGU70 | 7FGU80 - 60011 | |
| | 6.0 ton series | | 7FGU80 | | |
| | 0.0 ton senes | | 7FDU60 | | |
| | | 13Z | 7FDU70 | 7FDU80 - 60011 | |
| | · | | 7FDU80 | | |
| | 3.5 ton series | C4 (CM6 262) | 7FGCU35 | 7FGCU45 - 60011 | |
| Cushion tire | 3.5 ton series | G4 (GM6-262) | 7FGCU45 | * 7FGCU45 © 60011 | |
| | | | 7FGCU55 | | |
| | 5.5 ton series | G4 (GM6-262) | 7FGCU60 | 7FGCU70 - 60011 | |
| | | | 7FGCU70 | | |

^{*:} EEC spec.

FRAME NUMBER (2008.1 ~)

Frame No. Punching Position



| | Series | Engine | Vehicle model | Punching format |
|-------------------|----------------|------------------|---------------|-------------------|
| | | 0.4 (0.40, 0.00) | 7FGU35 | 7FCK140 70044 |
| | 2 F top porion | G4 (GM6-262) | 7FGKU40 | 7FGKU40 - 70011 |
| | 3.5 ton series | 15Z | 7FDU35 | A7FDKU40 - 70011 |
| | | 132 | 7FDKU40 | A71 DR040 - 70011 |
| | | G4 (GM6-262) | 7FGU45 | 7FGAU50 - 70011 |
| | 4.5 ton series | G4 (GIVIO-202) | 7FGAU50 | 71 07030-70011 |
| Pneumatic tire | 4.5 ton series | 15Z | 7FDU45 | A7FDAU50 - 70011 |
| Friedilialic life | | 132 | 7FDAU50 | A71 DA030-70011 |
| | | G4 (GM6-262) | 7FGU60 | , |
| | | | 7FGU70 | 7FGU80 - 70011 |
| | 6.0 ton series | | 7FGU80 | |
| | 0.0 ton series | 15Z | 7FDU60 | |
| | | | 7FDU70 | A7FDU80 - 70011 |
| | | | 7FDU80 | |
| | 2 F ton porios | C4 (CM6 262) | 7FGCU35 | 7FGCU45 - 70011 |
| Cushion tire | 3.5 ton series | G4 (GM6-262) | 7FGCU45 | * 7FGCU45 © 70011 |
| | | | 7FGCU55 | 7FGCU70 - 70011 |
| | 5.5 ton series | G4 (GM6-262) | 7FGCU60 | |
| | | | 7FGCU70 | * 7FGCU70 © 70011 |

^{*:} EEC spec.

HOW TO USE THIS MANUAL

EXPLANATION METHOD

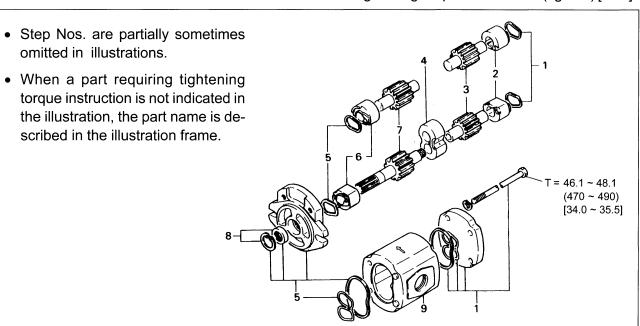
- 1. Operation procedure
 - (1) The operation procedure is described in either pattern A or pattern B below.

Pattern A: Explanation of each operation step with illustration.

Pattern B: Explanation of operation procedure by indicating step numbers in one illustration, followed by explanation of cautions and notes summarized as point operations.

Example of description in pattern B

DISASSEMBLY-INSPECTION-REASSEMBLY Tightening torque unit T = N·m (kgf-cm) [ft-lbf]



Disassembly Procedure

- 1 Remove the cover. [Point 1]
- 2 Remove the bushing [Point 2] ← Operation explained later
- 3 Remove the gear.

Point Operations Explanation of key point for operation with an illustration

[Point 1]

K

Disassembly: Put a match mark when removing the pump cover.

[Point 2]

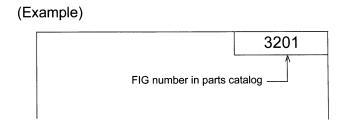
Inspection: Measure the bushing inside diameter.

Limit: 19.12 mm (0.7528 in)

2. How to read components figures

 The components figure uses the illustration in the parts catalog for the vehicle model. Please refer to the catalog for checking the part name.

The number at the right shoulder of each components figure indicates the Fig. number in the parts catalog.



3. Matters omitted in this manual

- (1) This manual omits description of the following jobs, but perform them in actual operation:
 - ① Cleaning and washing of removed parts as required
 - ② Visual inspection (partially described)

TERMINOLOGY

Caution:

Important matters of which negligence may cause hazards on human body. Be sure to observe them.

Note:

Important items of which negligence may cause breakage or breakdown, or matters in operation procedure requiring special attention.

Standard: Values showing allowable range in inspection and adjustment. Limit: Maximum or minimum allowable value in inspection or adjustment.

ABBREVIATIONS

| Abbreviation (code) | Meaning | Abbreviation (code) | Meaning |
|---------------------|-----------------------|---------------------|--|
| ASSY | Assembly | SAE | Society of Automotive Engineers (USA) |
| Cu | Cushion tire models | 0.4.0 | |
| LH | Left hand | SAS | System of active stability |
| LLC | Long life coolant | SST | Special service tool |
| | | STD | Standard |
| M/T | Manual transmission | T = | Tightening torque |
| NMR | No-load maximum | 1 - | |
| | speed | T/C | Torque converter & transmission |
| OPT | Option | ООТ | Number of teeth (○ ○) |
| O/S | Oversize | U/S | Undersize |
| Pn | Pneumatic tire models | W/ | With |
| PS | Power steering | L/ | Less |
| RH | Right hand | | |

Thank you very much for your reading. Please click here to buy After you pay. Then, you can download the complete manual instantly.

No waiting.